

The invention claimed is:

1. A method for use in a wireless communications system in which a mobile terminal communicates with a base station, the method comprising:

5 selecting a transmission rate on a reverse common signaling channel from the mobile terminal to the base station based on at least one measured channel-related metric.

2. The method of claim 1 wherein the channel-related metric is a pilot strength which is measured by the mobile terminal.

10 3. The method of claim 1 wherein the channel-related metric is power spectral density which is measured by the mobile terminal.

4. The method of claim 1 wherein the transmission rate is selected based on the channel-related metrics of both a pilot signal strength and a power spectral density which are measured by the mobile terminal.

15 5. A method for use in a wireless communications system in which a mobile terminal communicates with a base station, the method comprising:

comparing at least one measured channel-related metric with at least one associated threshold level to determine, based on the comparison, a transmission rate for use on a reverse common signaling channel from among a plurality of possible transmission rates.

20 6. The method of claim 5 wherein the plurality of possible transmission rates are transmission rates that are supported by the base station.

7. The method of claim 6 further comprising receiving the values of the supported rates from the base station.

8. The method of claim 5 further comprising receiving the at least one associated threshold level from the base station.

9. The method of claim 8 wherein the associated threshold level is received from the base station in an overhead message that is continuously
5 broadcast by the base station.

10. The method of claim 5 wherein the associated threshold level is stored in the mobile terminal.

11. The method of claim 5 wherein the channel-related metric is a pilot strength the measurement of which is compared with at least one associated
10 pilot strength threshold level to determine the transmission rate.

12. The method of claim 5 wherein the channel-related metric is a power spectral density the measurement of which being compared with at least one associated power spectral density threshold level to determine the transmission rate.

15 13. The method of claim 11 wherein the at least one pilot strength threshold level is modified by a re-probe offset to determine a transmission rate for a re-probe signal transmitted on the reverse common signaling channel.

14. The method of claim 13 wherein the re-probe offset is received from the base station.

20 15. The method of claim 5 wherein the channel-related metric is a both a pilot strength and a power spectral density the measurements of which being respectively compared with at least one associated pilot strength threshold level and at least one associated power spectral density threshold level to determine the transmission rate.

16. The method of claim 15 wherein the determined transmission rate is the maximum transmission rate that both comparisons indicate as being an acceptable transmission rate.

17. A method for use in a wireless communications system in which a
5 mobile terminal communicates with a base station, the method comprising:
sending information to enable the base station select a transmission rate on a reverse common signaling channel based on at least one channel-related metric measured by the mobile terminal.

18. The method of claim 17 wherein the information comprises at least
10 one threshold level associated with the channel-related metric for use by the mobile terminal in selecting the transmission rate from among a plurality of possible transmission rates by comparing the measured channel-related metric with the associated threshold level.

19. The method of claim 18 wherein the threshold level is transmitted in
15 an overhead message that is continuously broadcast by the base station.

20. The method of claim 17 wherein the information further comprises a plurality of possible transmission rates that the base station supports on the reverse common signaling channel.

21. The method of claim 17 wherein the channel-related metric is a pilot
20 strength, which is measured by the mobile terminal, and the associated threshold level is at least one pilot strength threshold level.

22. The method of claim 17 wherein the channel-related metric is a power spectral density, which is measured by the mobile terminal, and the associated threshold level is at least one power spectral density threshold level.

23. The method of claim 17 wherein the channel-related metric is both a pilot strength and a power spectral density, which are both measured by the mobile terminal, and the associated threshold level is at least one pilot strength threshold level and at least one power spectral density threshold.

5 24. The method of claim 21 wherein the information further comprises a re-probe offset for use by the mobile terminal in modifying the at least one pilot strength threshold level for determining a transmission rate for a re-probe signal transmitted by the mobile terminal on the reverse common signaling channel.